#### PATENT COOPERATION TREATY



#### From the INTERNATIONAL SEARCHING AUTHORITY

# To: PAULEY PETERSEN KINNE & ERICKSON Attn. Norris, Roland W. 2800 West Higgings Road, Suite 365 Hoffman Estates Illinois 60195

### PCT

#### INVITATION TO PAY ADDITIONAL FEES

(PCT Article 17(3)(a) and Rule 40.1)

Illinois 60195 UNITED STATES OF AMERICA	•
KCC- 1152-PCT	Date of mailing (day/month/year) 17/04/2003
Applicant's or agent's file reference	PAYMENT DUE within 45 KWKKs/days
15860	from the above date of mailing
International application No. PCT/US 02/38391	International filing date (day/month/year) 02/12/2002
Applicant KIMBERLY-CLARK WORLDWIDE, INC.	
This International Searching Authority	
(i) considers that there are 12 (nu by the claims indicated MMM/on the extra sheet:	mber of) inventions claimed in the international application covered
and it considers that the international application does no (Rules 13.1, 13.2 and 13.3) for the reasons indicated beau	DOCKETED  DATE 4/22/03 OI JUNE 03  ATTORNEY  SECRETARY DESPONSE / PAY FEES
<ul> <li>(ii) X has carried out a partial international search (see An on those parts of the international application which relate 1-3,24-27,28-30(in part)</li> </ul>	
(iii) will establish the international search report on the other p to which, additional fees are paid	parts of the international application only if, and to the extent
2. The applicant is hereby invited, within the time limit indicated	above, to pay the amount indicated below:
EUR 945,00 x 11	= <u>EUR 10.395,00</u>
Fee per additional invention number of additional in	ventions total amount of additional fees
Or, x	= -
The applicant is informed that, according to Rule 40.2(c), the pi.e., a reasoned statement to the effect that the international apport hat the amount of the required additional fee is excessive.	ayment of any additional fee may be made under protest, plication complies with the requirement of unity of invention
3. Claim(s) Nos.  Article 17(2)(b) because of defects under Article 17(2)(a)	have been found to be unsearchable under and therefore have not been included with any invention.
Name and mailing address of the International Searching Authority  European Patent Office, P.B. 5818 Patentlaan 2  NL-2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016	Authorized officer Alicja Van der Heijden

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-3, 24, 25, 26, 27, 28 (IN PART), 29 (IN PART), 30 (IN PART)

An in-line formed non-laminated web comprising multiple layers of composite material, whereby the composite web has a Z-direction gradient and discontinuous zones in one of the machine direction or the cross direction.

The Z-direction gradient being in a type of absorbent in each material layer.

2. Claims: 4, 5, 28 (IN PART), 30 (IN PART)

An in-line formed non-laminated web comprising multiple layers of composite material, whereby the composite web has a Z-direction gradient and discontinuous zones in one of the machine direction or the cross direction.

The Z-direction gradient being in an amount of absorbent in each material layer.

3. Claims: 6, 7, 8, 28 (IN PART), 30 (IN PART)

An in-line formed non-laminated web comprising multiple layers of composite material, whereby the composite web has a Z-direction gradient and discontinuous zones in one of the machine direction or the cross direction.

The Z-direction gradient being in a type of thermoplastic fiber in each material layer.

4. Claims: 9, 10, 28 (IN PART), 30 (IN PART)

An in-line formed non-laminated web comprising multiple layers of composite material, whereby the composite web has a Z-direction gradient and discontinuous zones in one of the machine direction or the cross direction.

The Z-direction gradient being in an amount of thermoplastic fiber in each material layer.

5. Claims: 11, 28 (IN PART), 30 (IN PART)

An in-line formed non-laminated web comprising multiple layers of composite material, whereby the composite web has a Z-direction gradient and discontinuous zones in one of the machine direction or the cross direction.

The Z-direction gradient being in differing densities of the material layers.

6. Claims: 12, 28 (IN PART), 30 (IN PART)

An in-line formed non-laminated web comprising multiple layers of composite material, whereby the composite web has a Z-direction gradient and discontinuous zones in one of the machine direction or the cross direction.

The Z-direction gradient being in differing thicknesses of the material layers.

7. Claims: 13, 14, 29 (IN PART), 30 (IN PART)

An in-line formed non-laminated web comprising multiple layers of composite material, whereby the composite web has a Z-direction gradient and discontinuous zones in one of the machine direction or the cross direction.

The zones being intermittent in a type of absorbent in each material layer.

8. Claims: 15, 16, 29 (IN PART), 30 (IN PART)

An in-line formed non-laminated web comprising multiple layers of composite material, whereby the composite web has a Z-direction gradient and discontinuous zones in one of the machine direction or the cross direction.

The zones being intermittent in an amount of absorbent in each material layer.

9. Claims: 17, 18, 19, 29 (IN PART), 30 (IN PART)

An in-line formed non-laminated web comprising multiple layers of composite material, whereby the composite web has a Z-direction gradient and discontinuous zones in one of the machine direction or the cross direction.

The zones being intermittent in a type of thermoplastic fiber in each material layer.

10. Claims: 20, 21, 29 (IN PART), 30 (IN PART)

An in-line formed non-laminated web comprising multiple layers of composite material, whereby the composite web has a Z-direction gradient and discontinuous zones in one of the machine direction or the cross direction.

The zones being intermittent in an amount of thermoplastic fiber in each material layer.

11. Claims: 22, 29 (IN PART), 30 (IN PART)

An in-line formed non-laminated web comprising multiple layers of composite material, whereby the composite web has a Z-direction gradient and discontinuous zones in one of the

machine direction or the cross direction.

The zones being intermittent in differing densities of the material layers.

12. Claims: 23, 29 (IN PART), 30 (IN PART)

An in-line formed non-laminated web comprising multiple layers of composite material, whereby the composite web has a Z-direction gradient and discontinuous zones in one of the machine direction or the cross direction.

The zones being intermittent in differing thicknesses of the material layers.

The single general concept covering all separate inventions is the notion that an on-line formed composite web having a Z-direction gradient and having zones of different material intermittently placed in one of the machine direction or the cross direction solves the underlying technical problem of providing a single composite structure having fluid intake, distribution and retention properties in an absorbent article.

This concept is known in the state of the art (WO 0135886, page 7 line 2-6, page 16 line 13-15, page 18 line 21 - page 19 line 2, figures).

As the single general concept is not novel it cannot be the single general inventive concept required to be present by Article 3(4)(iii) and Rule 13.1 PCT. When considering the whole set of claims in the light of the description no further technical features could be identified which could serve as same or corresponding technical features in the sense of Rule 13.2 PCT to restore unity of invention.

The invention first mentioned in the claims 1-3, 24, 25, 26 and 27 (subject 1) has been the subject of a complete search and claims 28, 29 and 30 were searched partially as far as they relate to the first subject. The subjects 2-12 are not mutually linked by a further general inventive concept and searching each subject requires a major search effort.

The application relates to a plurality of inventions, or groups of inventions, in the sense of Rule 13.1 PCT. They have been divided as defined above. If the applicant pays additional fees for one (or more) not yet searched group(s) of invention(s), then the further search(es) may reveal further prior art that gives evidence of a further lack of unity 'a posteriori' within one (or more) of the not yet searched group(s). In such a case only the first invention in this (each of these) group(s) of inventions, which is considered to lack unity of invention, will be the subject of a search.

No further invitation to pay further additional fees will be issued. This is because Article 17(3)(a) PCT stipulates that the ISA shall establish the International Search Report on those parts of the

International application No.

#### INVITATION TO PAY ADDITIONAL FEES

PCT/US 02/38391

international application which relate to the invention first mentioned in the claims ('main invention') and for those parts which relate to inventions in respect of which the additional fees were paid. Neither the PCT nor the PCT guidelines provide a legal basis for further invitations to pay further additional search fees (W17/00, point 11 and W1/97, points 11-16).

- 1. The present communication is an Annex to the invitation to pay additional fees (Form PCT/ISA/206). It shows the results of the international search established on the parts of the international application which relate to the invention first mentioned in claims Nos.:
- 1-3, 24-27 2.This communication is not the international search report which will be established according to Article 18 and Rule 43.
- 3.If the applicant does not pay any additional search fees, the information appearing in this communication will be considered as the result of the international search and will be included as such in the international search report.
- 4.If the applicant pays additional fees, the international search report will contain both the information appearing in this communication and the results of the international search on other parts of the international application for which such fees will have been paid.

C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.			
Х	WO 01 35886 A (HOOD RYAN K ;BOEHMER BRIAN E (US); ERSPAMER JOHN P (US); KALMAN MI) 25 May 2001 (2001-05-25) the whole document	1-3, 24-30			
Α	US 5 156 902 A (PIEPER CHRISTOPHER M ET AL) 20 October 1992 (1992-10-20) column 2, line 40 -column 4, line 4 column 13, line 53 -column 14, line 27; claims; figures	1-3, 24-30			
X	US 5 429 788 A (VAN EPEREN THOMAS W ET AL) 4 July 1995 (1995-07-04) abstract column 4, line 57 -column 5, line 5 column 5, line 57 -column 6, line 5 column 7, line 65 -column 8, line 6 column 11, line 63-66; figures	1-3,24, 26-30			
X	US 5 855 571 A (WIDLUND URBAN ET AL) 5 January 1999 (1999-01-05) column 7, line 32-43; claims; figures	1-3, 24-30			
X	EP 0 558 889 A (MOELNLYCKE AB) 8 September 1993 (1993-09-08) page 2, line 42-54 page 8, line 24-32; figures	1-3,25			
	, , , , , , , , , , , , , , , , , , ,				

X	Further documents are listed in the continuation of box C.
---	--

Χ

Patent family members are listed in annex.

- "A" document defining the general state of theart which is not considered to be of particular relevance
- "E" earlier document but published on or after theinternational filing date
- "L" document which may throw doubts on priority chim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- P\* document published prior to the internationalfiling date but later than the priority date claimed
- "T" later document published after theinternational filing date or priority date and not in conflict with theapplication but cited to understand the principle or theoryunderlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more othersuch documents, such combination being obvious to a person skilled in the art.
- \*&" document member of the same patent family

<sup>°</sup> Special categories of cited documents :

## Annex to Form PCT/ISA/206 CEMMUNICATION RELATING TO THE RESULTS OF THE PARTIAL INTERNATIONAL SEARCH

International Application No. PCT/US 02/38391

		PC1/US UZ/38391
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 110 528 A (MCNEIL PPC INC) 27 June 2001 (2001-06-27) column 7, line 11 -column 9, line 57 column 11, line 34-43; figures	1-3, 24-30
P,A	US 2002/169430 A1 (KIRK ROBERT REX ET AL) 14 November 2002 (2002-11-14) paragraphs '0029!-'0040!; claims; figures	1-3, 24-30
A	US 5 728 082 A (ARESKOUG STEFAN ET AL) 17 March 1998 (1998-03-17) column 3, line 50-53; claims; figures	1-3,24, 27-30
-		

3

#### **Patent Family Annex**

Information on patent family members

International Application No PCT/US 02/38391

	atent document d in search report		Publication date		Patent family member(s)	Publication date
WO	0135886	A	25-05-2001	AU AU BR CN EP JP WO AU EP WO	1619201 A 751367 B2 5293600 A 0011589 A 1351683 T 1214465 A1 1242017 A1 2003505267 T 0071790 A1 0135886 A1 3123301 A 1263374 A1 0154641 A1	30-05-2001 15-08-2002 12-12-2000 16-04-2002 29-05-2002 19-06-2002 25-09-2002 12-02-2003 30-11-2000 25-05-2001 07-08-2001 11-12-2002 02-08-2001
US	5156902	A	20-10-1992	US AT AU AU AU AU BR AU DE DE EP ES KR	5028224 A 5102585 A 128618 T 150637 T 649365 B2 3036892 A 667774 B2 6301694 A 634330 B2 6923491 A 9100040 A 2016411 A1 69113485 D1 69113485 T2 69125402 D1 69125402 T2 0439012 A2 0642778 A1 2080166 T3 2100004 T3 151595 B1 9100048 A	02-07-1991 07-04-1992 15-10-1995 15-04-1997 19-05-1994 11-03-1993 04-04-1996 14-07-1994 18-02-1993 11-07-1991 22-10-1991 09-07-1991 09-11-1995 28-03-1996 30-04-1997 10-07-1997 31-07-1991 15-03-1995 01-02-1996 01-06-1997 01-10-1998 30-10-1991
US	5429788	А	04-07-1995	AU BR CA DE EP ES FR GB JP PH SG ZA	680719 B2 1509795 A 9501200 A 2127867 A1 69524134 D1 69524134 T2 0679446 A2 2164113 T3 2717836 A1 2287967 A 7289589 A 30613 A 28232 A1 9501879 A	07-08-1997 05-10-1995 05-03-1996 29-09-1995 10-01-2002 11-07-2002 02-11-1995 16-02-2002 29-09-1995 B 04-10-1995 07-11-1995 06-08-1997 01-04-1996 11-12-1995
-	5855571	A	05-01-1999	SE AT AU AU CA CZ	501699 C2 192658 T 677677 B2 7087694 A 2165089 A1 9503351 A3	24-04-1995 15-05-2000 01-05-1997 17-01-1995 05-01-1995 17-04-1996

#### Patent Family Ann x

Information on patent family members

International Application No PCT/US 02/38391

	atent document d in search report	- (	Publication date	ļ	Patent family member(s)	Publication date
US	5855571	A	<del></del>	DE	69424422 D1	15-06-2000
- •				DE	69424422 T2	
				DK	706402 T3	
				ĒΡ	0706402 A1	
				ËS	2148334 T3	
				FΙ	956092 A	18-12-1995
				GB	2280115 A	25-01-1995
				GR	3033722 T3	
				HU	76080 A2	
				JP	8511459 T	03-12-1996
				NO	955194 A	13-02-1996
				NZ	268118 A	24-10-1997
				PL	312291 A1	15-04-1996
				PT	706402 T	29-09-2000
				SE	9302146 A	22-12-1994
				WO	9500183 A1	05-01-1995
				SK	157495 A3	03-07-1996
				ZA	9404252 A	08-02-1995
EP	055888 <b>9</b>	Α	08-09-1993	SE	463747 B	21-01-1991
	, , , , , , , , , , , , , , , , , , ,	• •		AT	91876 T	15-08-1993
				EP	0558889 A1	08-09-1993
				ĞR	3019463 T3	30-06-1996
				GR	3033027 T3	31-08-2000
				AT	135903 T	15-04-1996
				ΑÜ	630713 B2	05-11-1992
				AU	5837590 A	07-01-1991
				CA	2055605 A1	01-12-1990
				DE	69002403 D1	02-09-1993
				DE	69002403 T2	11-11-1993
				DE	69026277 D1	02-05-1996
				DE	69026277 T2	22-08-1996
				DK	401189 T4	04-11-1996
				DK	558889 T3	20-05-1996
				EP	0401189 A1	05-12-1990
				ES	2042269 T3	01-12-1993
				ES	2085056 T3	16-05-1996
				FI	100298 B1	14-11-1997
				GR	3020762 T3	30-11-1996
				HU	62190 A2	28-04-1993
				JP	2967207 B2	25-10-1999
				JP	4506305 T	05-11-1992
				NO	914722 A	
				SE	8901964 A	01-12-1990
				WO	9014815 A1	13-12-1990
EP	1110528	Α	27-06-2001	US	6459016 B1	01-10-2002
				ΑU	7251000 A	28-06-2001
				BR	0006811 A	27-11-2001
				CA	2329389 A1	23-06-2001
				CN	1312057 A	12-09-2001
				CZ	20004837 A3	14-11-2001
				EP	1110528 A2	27-06-2001
US	2002169430	A1	14-11-2002	WO	02091975 A1	21-11-2002
US	5728082	A	17-03-1998	SE	465553 B	30-09-1991
				AT	126690 T	15-09-1995

Pat nt Family Annex

Information on patent amily members International Application No PCT/US 02/38391

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
US 5728082 A	- <del></del>	AU	644628 B2	16-12-1993
		AU	7251491 A	03-09-1991
. S		CA	2075963 A1	15-08-1991
V		DE	69112430 D1	28-09-1995
		DE	69112430 T2	08-02-1996
		DK	592401 T3	16-10-1995
		EP	0592401 A1	20-04-1994
		ES	2076523 T3	01-11-1995
		FI	923616 A	12-08-1992
		GR	3017292 T3	31-12-1995
		HU	66278 A2	28-11-1994
		JP	3018008 B2	13-03-2000
		JP	5504083 T	01-07-1993
		MX	173712 B	23-03-1994
		NO	923172 A ,B,	13-10-1992
		NZ	236961 A	23-12-1992
		SE	9000534 A	15-08-1991
		WO	9111978 A1	22-08-1991
		ZA	9100784 A	27-11-1991